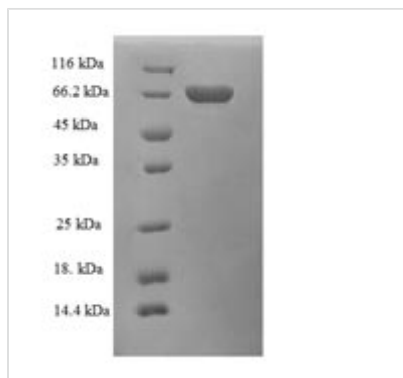




# Recombinant Human Alcohol dehydrogenase class-3 (ADH5)

<b>Product Code</b>	CSB-EP001357HU
<b>Relevance</b>	Class-III ADH is rarkably ineffective in oxidizing ethanol, but it readily catalyzes the oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione.
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P11766
<b>Alias</b>	Alcohol dehydrogenase 5;Alcohol dehydrogenase class chi chain;Alcohol dehydrogenase class-III;Glutathione-dependent formaldehyde dehydrogenase (EC:1.1.1.-) ;FALDH ;FDH ;GSH-FDHS-(hydroxymethyl)glutathione dehydrogenase (EC:1.1.1.284)
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	ANEVIKCKAAVAWEAGKPLSIEEIEVAPPKAHEVRIKIIATAVCHTDAYTLSGADP EGCFPVILGHEGAGIVESVGEGVTKLKAGDTVIPLYIPQCGECKFCLNPKTNLC QKIRVTQGKGLMPDGTSRFTCKGKTLHYMGTSSTFSEYTVVADISVAKIDPLAP LDKVCLLGCGISTGYGAAVNTAKLEPGSVCAVFGGLGGVGLAVIMGCKVAGASR IIGVDINKDKFARAKEFGATECINPQDFSKPIQEVLIEMTDGGVDYSFECIGNVK VMRAALEACHKGWGVSVVVGVAAASGEEIATRPFQLVTGRTWKGTAFGGWKS VESVPKLVSEYMSKKIKVDEFVTHNLSFDEINKAFELMHSGKSI RTVVKI
<b>Lead Time</b>	3-7 business days
<b>Research Area</b>	Metabolism
<b>Source</b>	E.coli
<b>Gene Names</b>	ADH5
<b>Expression Region</b>	2-374aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal GST-tagged
<b>Mol. Weight</b>	66.6kDa
<b>Protein Description</b>	Full Length of Mature Protein
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

Amino acids 2-374 constitute the expression domain of recombinant Human ADH5. The theoretical molecular weight of the ADH5 protein is 66.6 kDa. The ADH5 protein was expressed in e.coli. The N-terminal GST tag was fused into the coding gene segment of ADH5, making it easier to detect and purify the ADH5 recombinant protein in the later stages of expression and purification.

Alcohol dehydrogenase class-3 (ADH5) is a protein involved in ethanol metabolism, with research covering multiple aspects. The primary focus lies in its role in the ethanol degradation pathway, particularly its expression and activity regulation in the liver. Scientists are committed to figuring out how ADH5 works in breaking down ethanol, with the goal of revealing its roles in diseases related to alcohol and drinking behavior. Besides, ADH5 is associated with some drug metabolism and toxicity, making it a subject of considerable interest in the fields of pharmacology and toxicology. Recent studies suggest that ADH5 may play a crucial role in certain types of cancer, making it a hot target in cancer research as well.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.